
लेन, लेन-फ़ेग और फर्ग्यूसन पैटर्न के हड्डी
धारण फोरसेप्स — विशिष्टि

(पहला पुनरीक्षण)

Lane's, Lane-Fagge's and
Fergusson's Patterns Bone Holding
Forceps — Specification

(First Revision)

ICS 11.040.40

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भारतीय मानक ब्यूरो
BUREAU OF INDIAN STANDARDS
मानक भवन, 9 बहादुर शाह ज़फ़र मार्ग, नई दिल्ली - 110002
MANAK BHAVAN, 9 BAHADUR SHAH ZAFAR MARG
NEW DELHI - 110002

www.bis.gov.in www.standardsbis.in

FOREWORD

This Indian Standard (First Revision) was adopted by the Bureau of Indian Standards, after the draft finalized by the Orthopaedic Instruments, Implants and Accessories Sectional Committee had been approved by the Medical Equipment and Hospital Planning Division Council.

This standard was originally published in 1971. The first revision of this standard has been brought out to align it with the recent developments and to bring the standard in line with the latest style and format of Indian Standards.

For the purpose of deciding whether a particular requirement of this standard is complied with the final value, observed or calculated, expressing the result of a test or analysis shall be rounded off in accordance with IS 2 : 2022 'Rules for rounding off numerical values (*second revision*)'. The number of significant places retained in the rounded off value should be same as that of the specified value in this standard.

*Indian Standard***LANE'S, LANE-FAGGE'S AND FERGUSSON'S PATTERNS
BONE HOLDING FORCEPS — SPECIFICATION***(First Revision)***1 SCOPE**

This standard specifies the requirements for bone holding forceps of Lane's, Lane-Fagge's and Fergusson's patterns.

2 REFERENCES

The standards given below contain provisions which, through reference in this text, constitute provisions of this standard. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this standard are encouraged to investigate the possibility of applying the most recent edition of these standards.

<i>IS No.</i>	<i>Title</i>
IS 1570 (Part 5) : 1985	Schedules for wrought steels: Part 5 Stainless and heat-resisting steels (<i>second revision</i>)
IS 7531 : 1990	Surgical Instruments — Corrosion resistance of stainless-steel surgical instruments — Methods of tests (<i>first revision</i>)

3 MATERIAL**3.1 Arms**

The arms shall be of stainless steel conforming to designation X30Cr13 of IS 1570 (Part 5).

3.2 Screws

The screws shall be stainless steel conforming to designation X22Cr13 of IS 1570 (Part 5).

4 SHAPE AND DIMENSIONS

The shape and dimensions shall be as shown in Fig. 1, Fig. 2 and Fig. 3.

5 WORKMANSHIP AND FINISH

5.1 The forceps shall be free from rough edges, pits, burrs, cracks and blemishes of any kind.

5.2 The teeth on the jaws shall be well formed and clean.

5.3 The two arms shall move freely and smoothly at the joint without any undue play.

5.4 The forceps shall be finished smooth, passivated and polished bright except that in the case of the forceps of Lane's and Lane-Fagge's patterns, the outside surface shall have matte finish to provide firm grip.

6 HEAT TREATMENT

The forceps shall be hardened and tempered to 380 HV to 420 HV.

7 TESTS**7.1 Rigidity Test**

Hold a piece of hardwood of minimum thickness of 12 mm, in the jaws of the forceps. Apply a compressive force of 1 000 N to the handles of the forceps at the place of maximum convexity. Allow the force to act for two minutes. On completion of the test, the forceps shall show no sign of damage or permanent set.

7.2 Corrosion Resistance Test

The forceps shall satisfy the requirements when tested in accordance with IS 7531.

8 MARKING

8.1 The forceps shall be marked with the following:

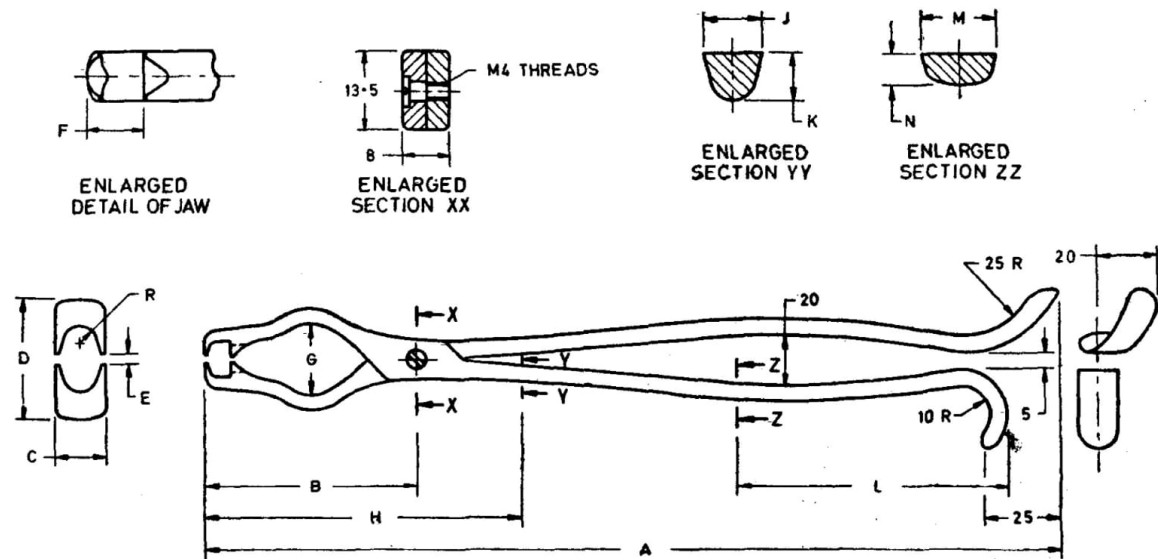
- Manufacturer's name, initials or registered trade-mark;
- Size of the forceps, in the case of Lane's and Lane-Fagge's patterns; and
- Country of origin.

8.2 BIS Certification Marking

The product(s) conforming to the requirements of this standard may be certified as per the conformity assessment schemes under the provisions of the *Bureau of Indian Standards Act, 2016* and the Rules and Regulations framed there under, and the product(s) may be marked with the Standard Mark.

9 PACKING

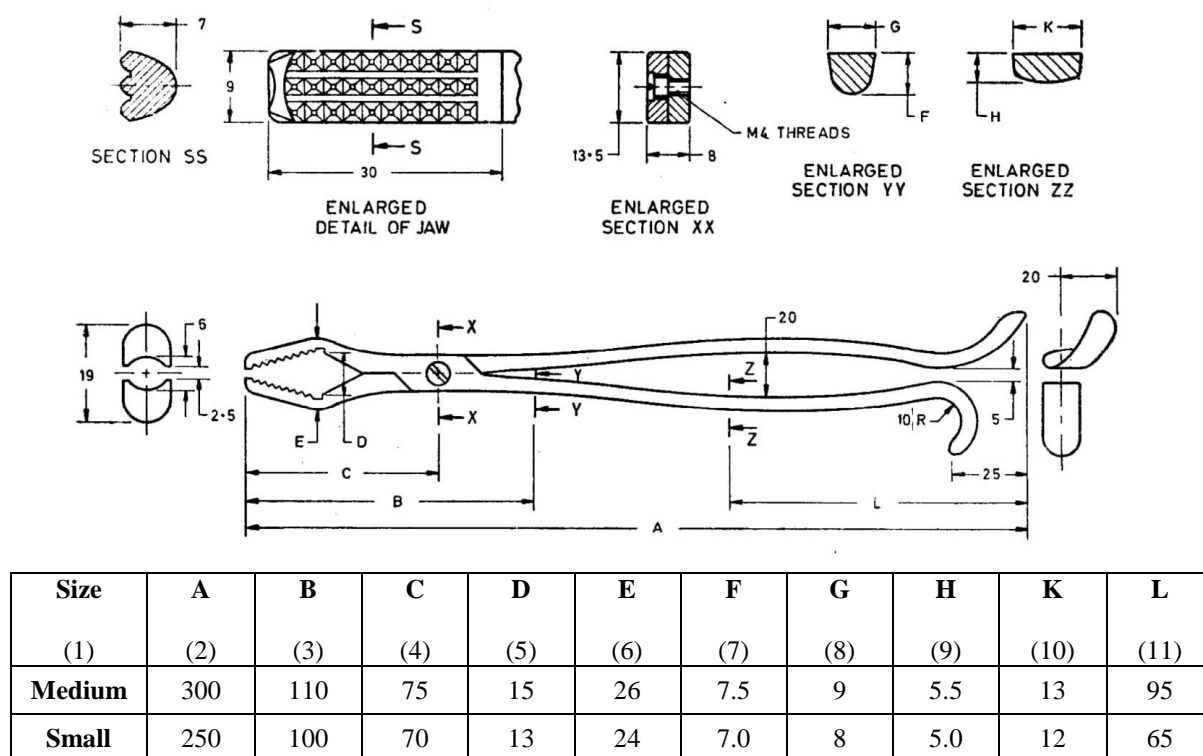
The packing shall be as agreed to between the purchaser and the supplier.



Size	A	B	C	D	E	F	G	H	J	K	L	M	N
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
Large	400	85	9.0	24	2.5	12	28	120	10	8.0	125	14	6.0
Medium	300	75	8.5	21	2.0	10	26	110	9	7.5	95	13	5.5
Small	250	65	8.0	18	2.0	8	24	100	8	7.0	65	12	5.0

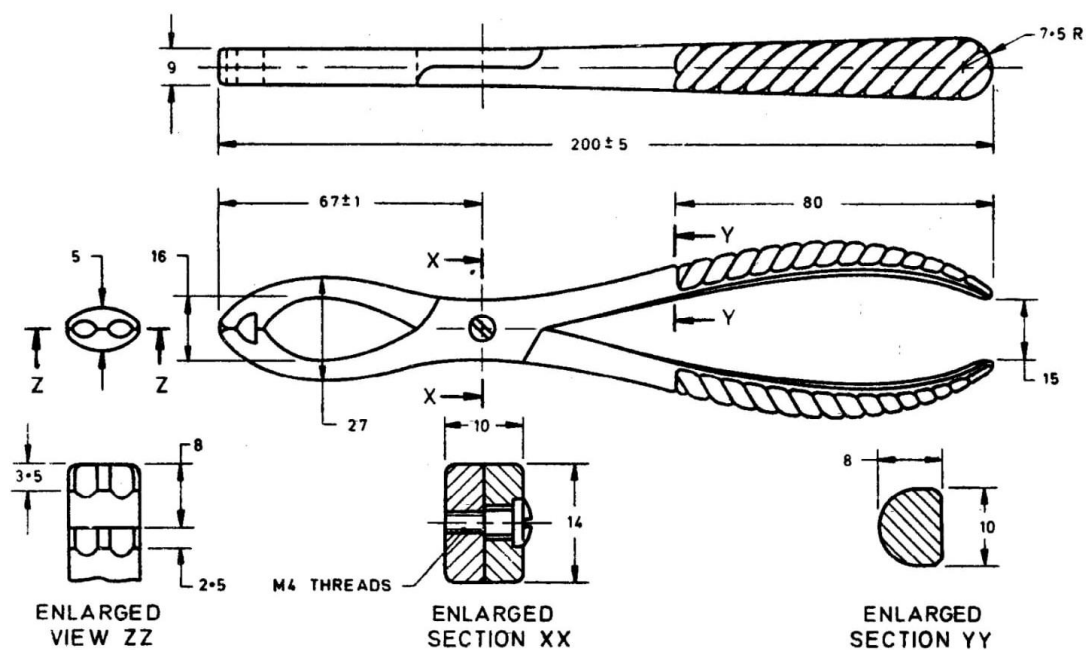
All dimensions in millimeters.

Fig. 1 BONE HOLDING FORCEPS: LANE'S PATTERN



All dimensions in millimeters.

FIG. 2 BONE HOLDING FORCEPS: LANE-FAGGE'S PATTERN



All dimensions in millimeters.

FIG. 3 BONE HOLDING FORCEPS: FERGUSSON'S PATTERN

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Amendments Issued Since Publication

Amend No.	Date of Issue	Text Affected

BUREAU OF INDIAN STANDARDS

Headquarters:

Manak Bhavan, 9 Bahadur Shah Zafar Marg, New Delhi 110002

Telephones: 2323 0131, 2323 3375, 2323 9402

Website: www.bis.gov.in

Regional Offices:

	Telephones
Central : 601/A, Konnectus Tower -1, 6 th Floor, DMRC Building, Bhavbhuti Marg, New Delhi 110002	{ 2323 7617
Eastern : 8 th Floor, Plot No 7/7 & 7/8, CP Block, Sector V, Salt Lake, Kolkata, West Bengal 700091	{ 2367 0012 2320 9474
Northern : Plot No. 4-A, Sector 27-B, Madhya Marg, Chandigarh 160019	{ 265 9930
Southern : C.I.T. Campus, IV Cross Road, Taramani, Chennai 600113	{ 2254 1442 2254 1216
Western : Plot No. E-9, Road No.-8, MIDC, Andheri (East), Mumbai 400093	{ 2821 8093

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